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TECHNICAL NOTICE

BISS-CA

Ateme DR5000

Upgrade Procedure 2.4.7.1

Version 1.0 (August 2020)

Contents

Document version

Version	Date	Comments / Changes
1.0	August 4, 2020	Initial version

1 INTRODUCTION

BISS-CA is a conditional access system based on open cryptographic standards. It uses a combination of symmetric and asymmetric ciphers to protect the transmitted content and entitle or revoke in real-time any receiver in an interoperable manner.

Eurovision Services (ES) will use the new BISS-CA standard in high-profile transmissions.

This document explains the requisites to upgrade the Ateme DR5000 decoder to be compatible with the new BISS-CA standard. This process requires the download of new firmware and must be performed by an engineer with direct access to the units.

2 REQUIREMENTS FOR BISS-CA COMPATIBILITY

To receive BISS-CA encrypted

- Firmware version 2.4.7.1 or more recent

- BISS-CA license: for units sold by Eurovision Services, after registration on www.eurovision.net, BISS-CA license and support is offered for a fee.

3 FIRMWARE UPGRADE

Please follow the instructions as described in the Application Note document, which can be downloaded from the following page:

https://www.eurovision.net/insights/technical/biss-ca-migration-files-download

4 DECODER REGISTRATION ON Eurovision.net

After firmware upgrade, decoders must be registered on the ES web site (https://www.eurovision.net/biss-ca-migration) to be authorized to receive BISS-CA encrypted transmissions.
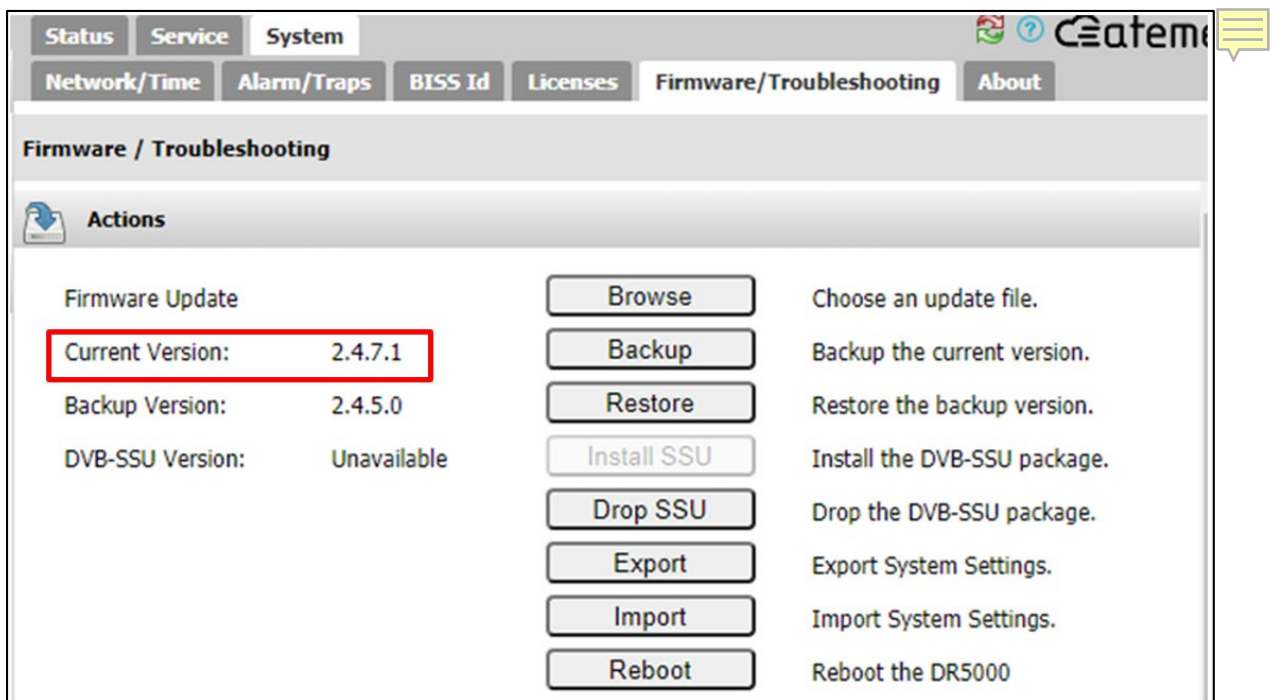
During the registration process, three screenshots are requested:

- **Serial Number:** found under *System > Licenses > License management* as shown in

the following screenshot

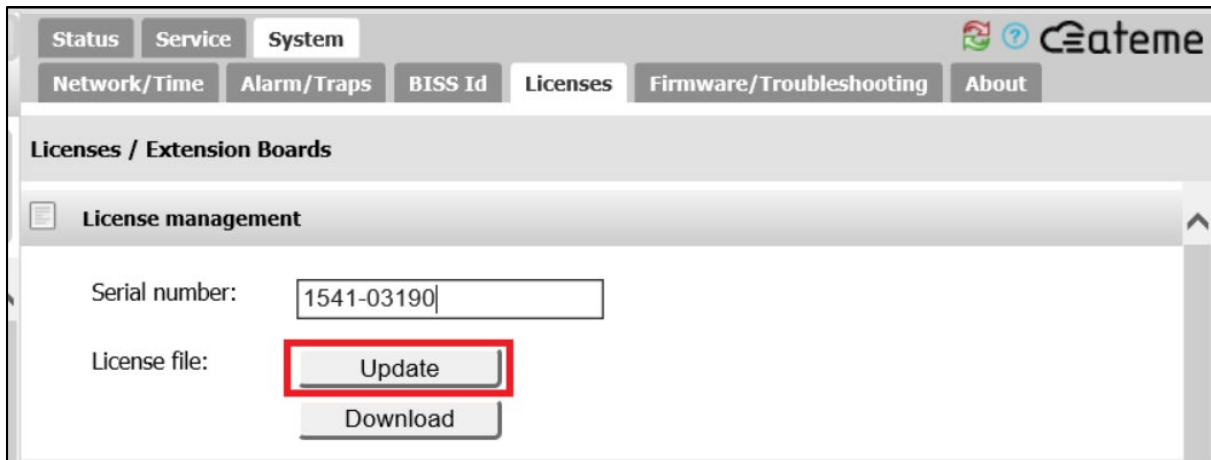- **Firmware version**: found under *System > Firmware / Troubleshooting*

- License file: which can be downloaded from section *System > Licenses*, as shown in the following picture.
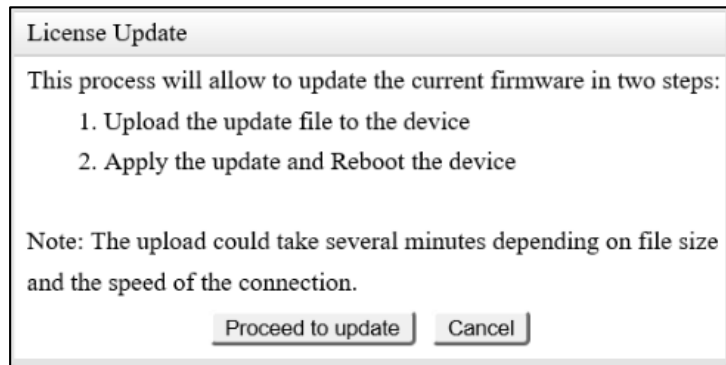
5 INSTALLATION OF BISS-CA LICENSE

For units sold by ES, a BISS-CA license will be provided after registration of the decoder in www.eurovision.net
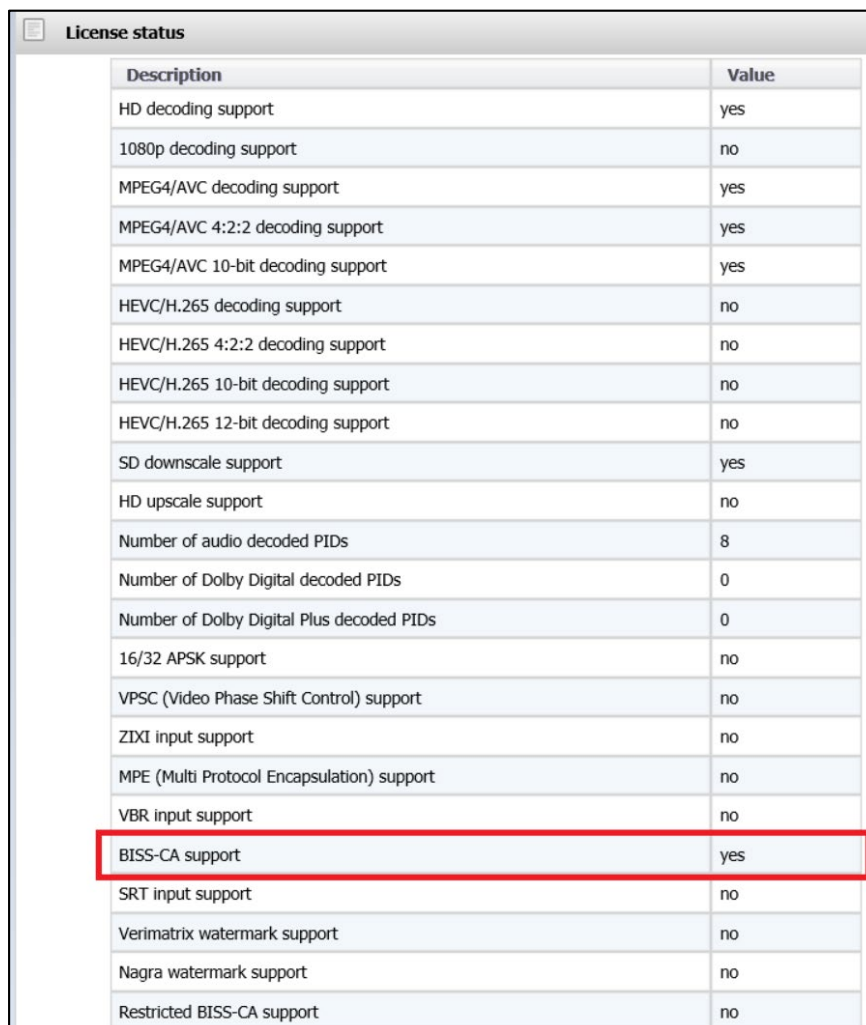
- The license will be sent by e-mail to the contact defined by the broadcaster during the registration. It consists of a license file that must be uploaded to the decoder in section *System > Licenses*, as shown in the following picture.

Click on "proceed to update" to start the update license process.

License Update

This process will allow to update the current firmware in two steps:

    1. Upload the update file to the device

    2. Apply the update and Reboot the device

Note: The upload could take several minutes depending on file size and the speed of the connection.

[Proceed to update] [Cancel]

After the license has been successfully installed and the decoder has rebooted, a new license "BISS-CA support" will appear under *System > Licenses*, as shown in the following picture.

License status

Description	Value
HD decoding support	yes
1080p decoding support	no
MPEG4/AVC decoding support	yes
MPEG4/AVC 4:2:2 decoding support	yes
MPEG4/AVC 10-bit decoding support	yes
HEVC/H.265 decoding support	no
HEVC/H.265 4:2:2 decoding support	no
HEVC/H.265 10-bit decoding support	no
HEVC/H.265 12-bit decoding support	no
SD downscale support	yes
HD upscale support	no
Number of audio decoded PIDs	8
Number of Dolby Digital decoded PIDs	0
Number of Dolby Digital Plus decoded PIDs	0
16/32 APSK support	no
VPSC (Video Phase Shift Control) support	no
ZIXI input support	no
MPE (Multi Protocol Encapsulation) support	no
VBR input support	no
BISS-CA support	yes
SRT input support	no
Verimatrix watermark support	no
Nagra watermark support	no
Restricted BISS-CA support	no

Notice that the licenses displayed in this screenshot are just an example. Licenses in your own decoders may be different.

6 EXTRACTION OF PUBLIC KEY

Once the BISS-CA license has been applied to the DR5000 decoder, the device BISS-CA public key file can be downloaded from section **System > BISS Id > BISS CA > Factory Key**. This is shown in the picture below.

This file **must be uploaded to the ES registration portal**, as explained in the "Technical Guidelines for BISS-CA access" document.

7 CONTACTS

Please report any technical issues with the upgrade to the BISS-CA upgrade team

BISS-CA@eurovision.net